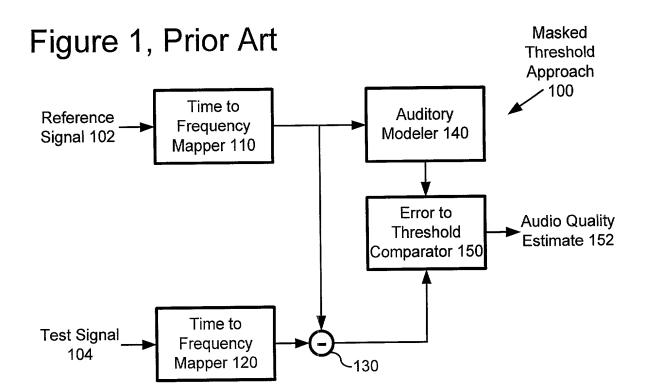
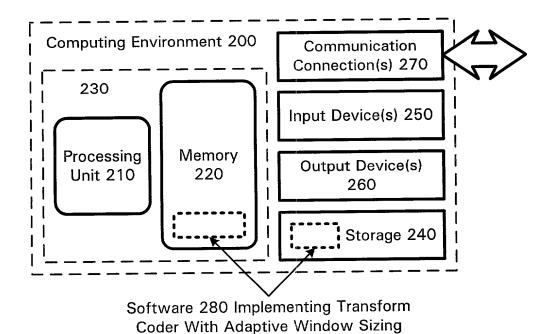
į.

Stephen A. Wight Klarquist Sparkman LLP 121 SW Salmon Street Suite 1600

Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344
For: QUALITY IMPROVEMENT
TECHNIQUES IN AN AUDIO
ENCODER

First Named Inventor: Chen Mailed: December 14, 2001 Sheet 1 of 16

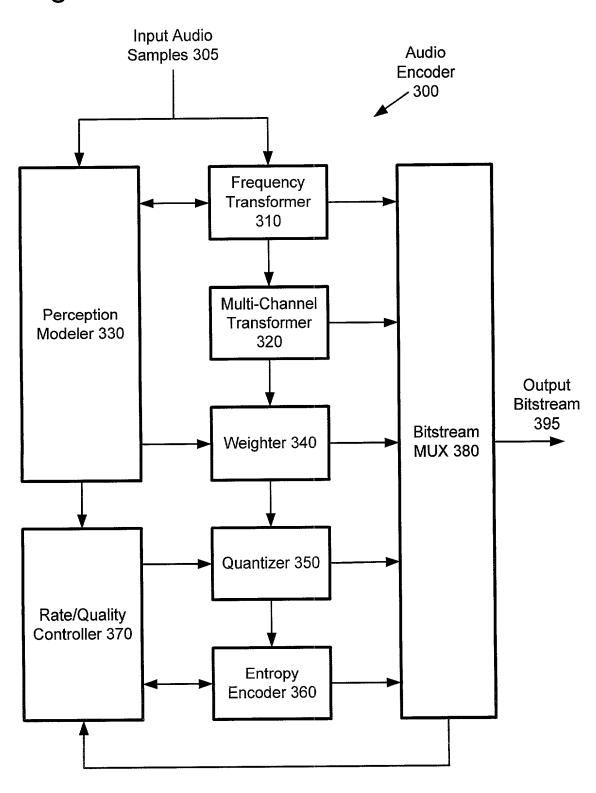




Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen Mailed: December 14, 2001

Sheet 2 of 16



Portland, Oregon 97204 Telephone: 503/226-7391

EJ.

14

2 ii ii

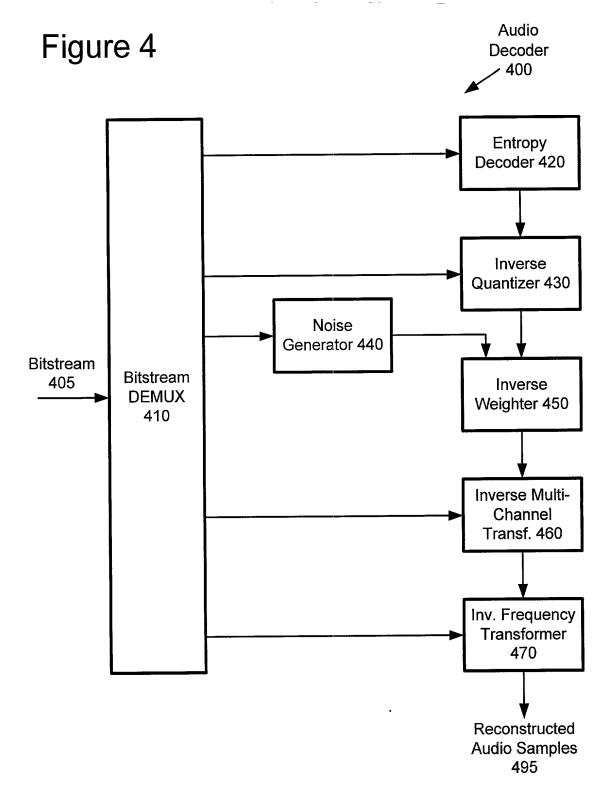
14

<u>.</u>

Our Ref. No. 3382-61344
For: QUALITY IMPROVEMENT
TECHNIQUES IN AN AUDIO
ENCODER

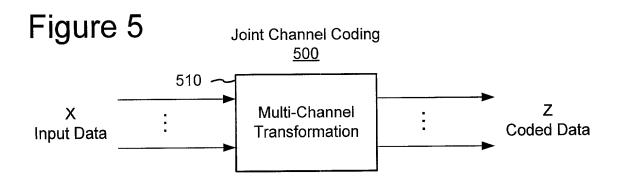
First Named Inventor: Chen Mailed: December 14, 2001

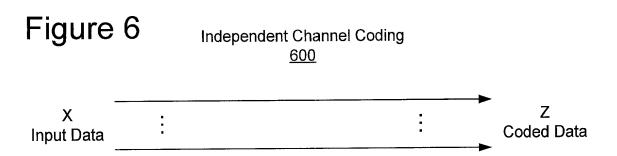
Sheet 3 of 16

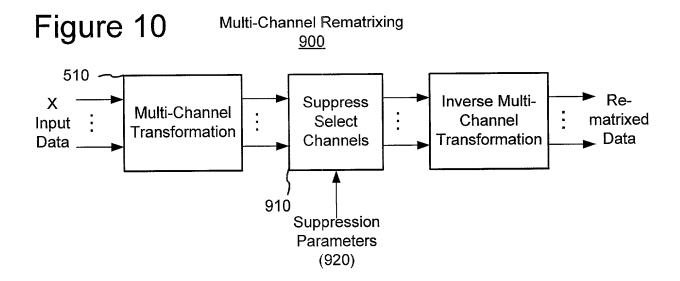


Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen Mailed: December 14, 2001 Sheet 4 of 16



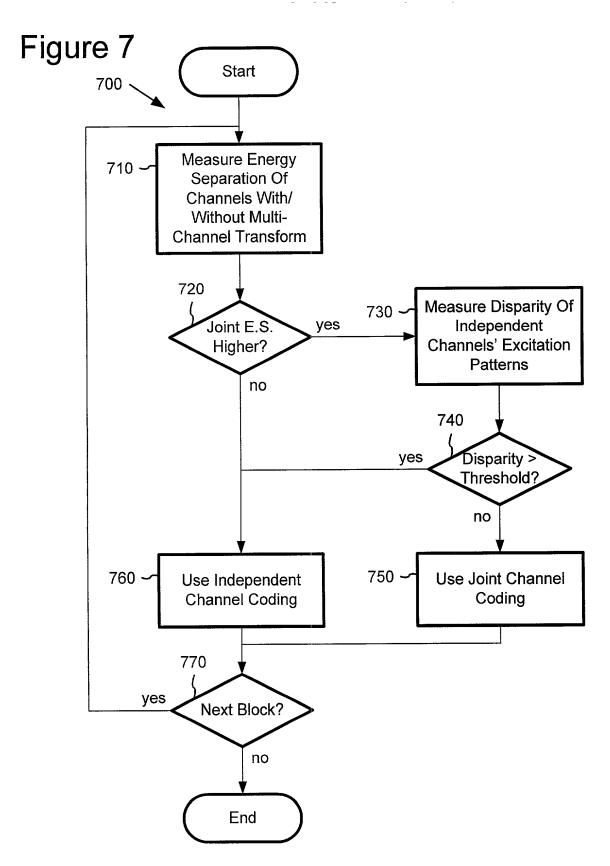




Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344
For: QUALITY IMPROVEMENT
TECHNIQUES IN AN AUDIO
ENCODER

First Named Inventor: Chen Mailed: December 14, 2001

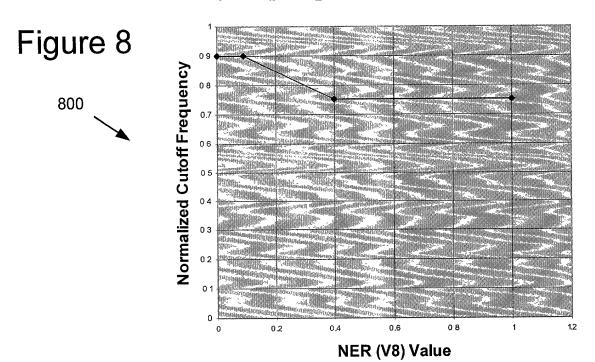
Sheet 5 of 16

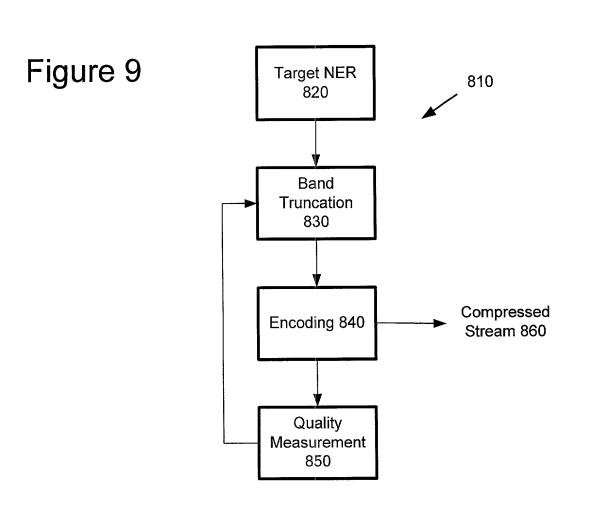


Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen Mailed: December 14, 2001

Sheet 6 of 16





Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen Mailed: December 14, 2001

Sheet 7 of 16

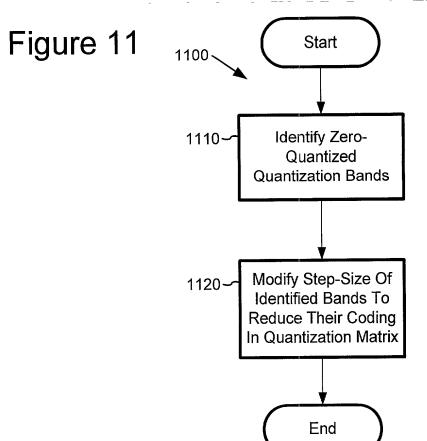
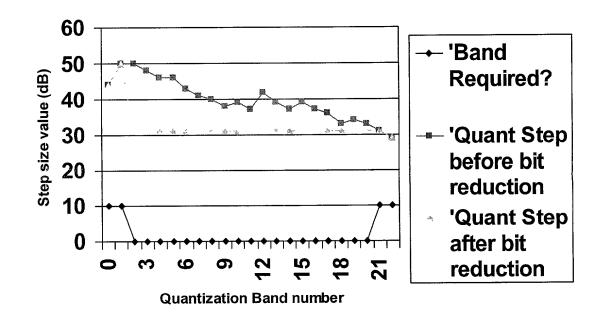


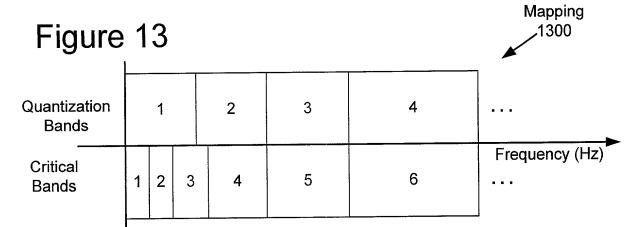
Figure 12

Quantizer step size modification to reduce bits



Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen Mailed: December 14, 2001 Sheet 8 of 16

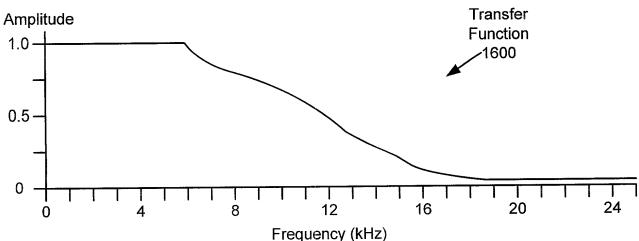


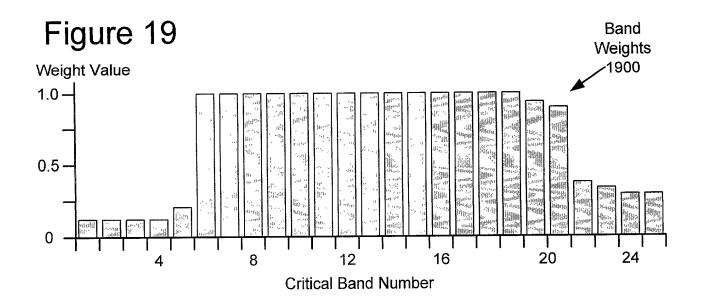


£#

ئالدە<u>ۋ</u>

H with their

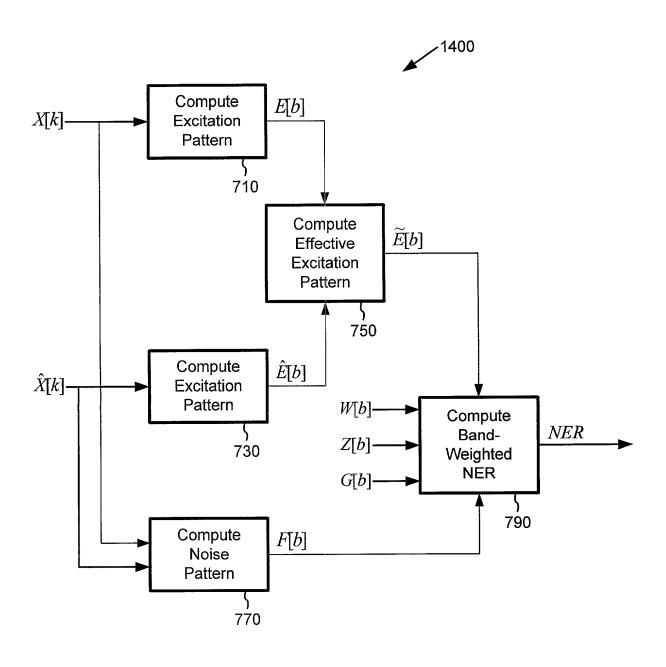




Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen **Mailed: December 14, 2001** Sheet 9 of 16

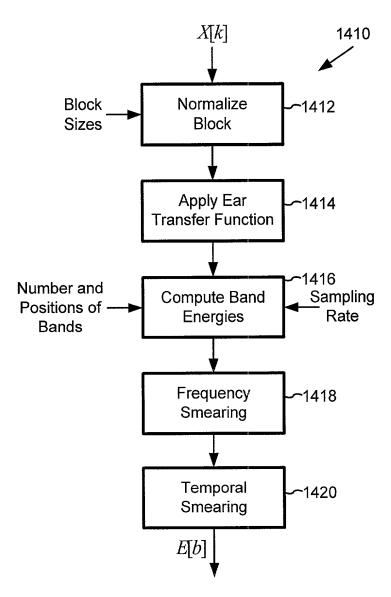
Figure 14a



Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen **Mailed: December 14, 2001** Sheet 10 of 16

Figure 14b



The galled stands of the stand of the stands of the stands

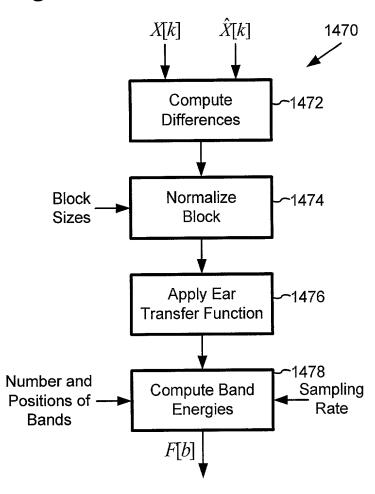
į, ji

Stephen A. Wight Klarquist Sparkman LLP 121 SW Salmon Street Suite 1600

Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen Mailed: December 14, 2001 Sheet 11 of 16

Figure 14c

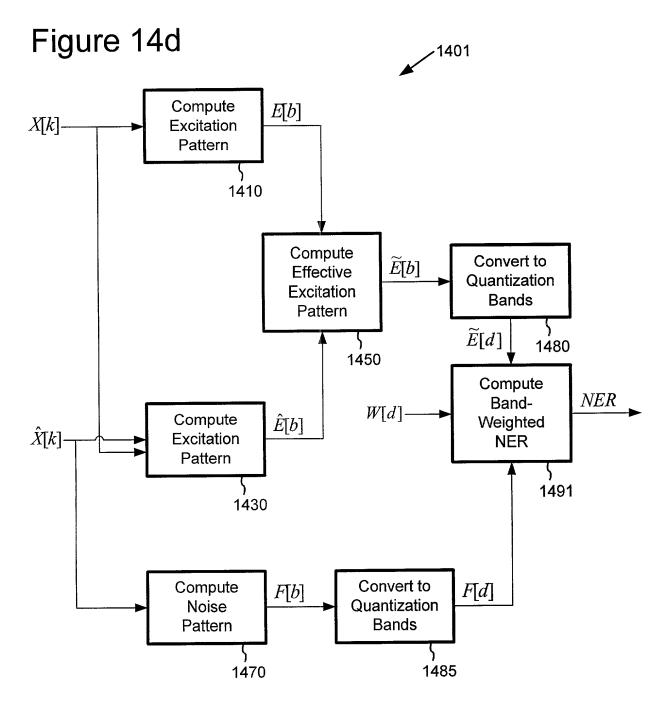


ž zž:

Stephen A. Wight Klarquist Sparkman LLP 121 SW Salmon Street Suite 1600

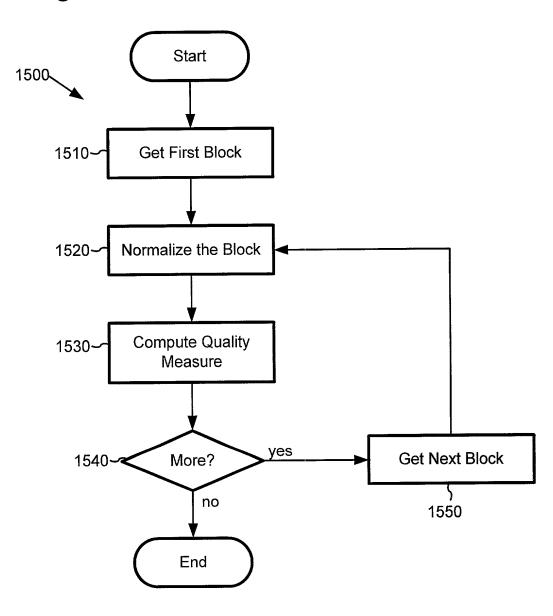
Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen Mailed: December 14, 2001 Sheet 12 of 16



Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344
For: QUALITY IMPROVEMENT
TECHNIQUES IN AN AUDIO
ENCODER

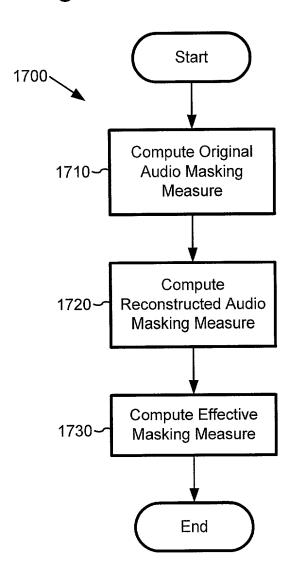
First Named Inventor: Chen Mailed: December 14, 2001 Sheet 13 of 16



Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen Mailed: December 14, 2001

Sheet 14 of 16

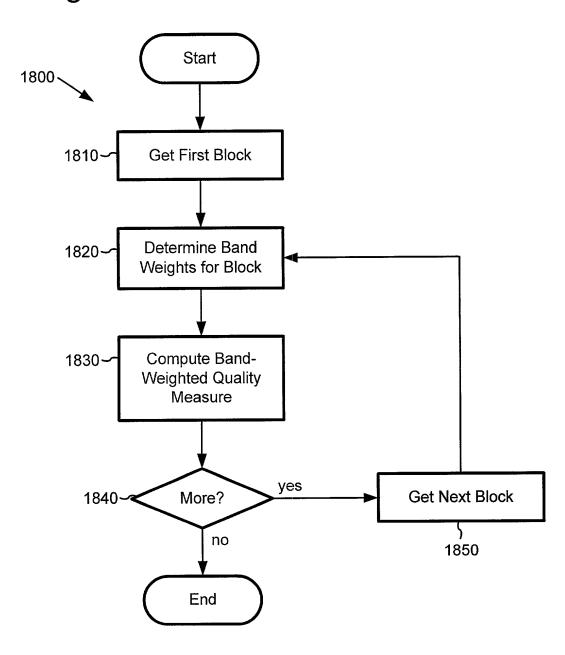


Stephen A. Wight Klarquist Sparkman LLP 121 SW Salmon Street Suite 1600 Portland, Oregon 97204

Telephone: 503/226-7391

Our Ref. No. 3382-61344

For: QUALITY IMPROVEMENT
TECHNIQUES IN AN AUDIO
ENCODER
First Named Inventor: Chen
Mailed: December 14, 2001
Sheet 15 of 16



The series are the series and the series are the series and the series are the series are the series and the series are the series and the series are the se

į di

Stephen A. Wight Klarquist Sparkman LLP 121 SW Salmon Street Suite 1600

Portland, Oregon 97204 Telephone: 503/226-7391 Our Ref. No. 3382-61344 For: QUALITY IMPROVEMENT TECHNIQUES IN AN AUDIO ENCODER

First Named Inventor: Chen Mailed: December 14, 2001

Sheet 16 of 16

